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OMSAPC Advisory Circular

Subject: Procedures for Obtaining 1980 and Subsequent Model Year Federal Certification Based on the State of California Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Certification.

I. Purpose

The purpose of this advisory circular (A/C) is to outline the procedures that EPA will use to issue 1980 and subsequent model year light-duty vehicle (LDV) and light-duty truck (LDT) certificates of conformity for vehicles covered by California Air Resources Board (CARB) Executive Orders.

II. Background

- A. In public hearings on May 16 through May 19 and August 4, 1977, EPA considered a request by the State of California for a waiver of Federal preemption (waiver) to enforce exhaust emission standards and test procedures for 1979 and subsequent model year California passenger cars, LDT's, and medium—duty vehicles (MDV's). The California LDT class includes those trucks with a gross vehicle weight rating (GVWR) of 6,000 pounds or less, and the California MDV class includes vehicles with a GVWR between 6,001 pounds and 8,500 pounds, inclusive.
- B. For the 1980 and subsequent model years, the State of California adopted passenger car exhaust emission standards which are less stringent than Federal LDV standards for CO emissions, and more stringent than Federal LDV standards for NOx emissions. The State of California also adopted 1980 and subsequent model year exhaust emission standards for LDT's which are more stringent than the Federal LDT standards. On June 14, 1978, EPA granted the State of California a waiver thereby allowing the State to apply their proposed exhaust emission standards and procedures to 1979 and subsequent model year vehicles to be sold in the State of California. A summary of the 1980 California and Federal emission standards for LDV's and LDT's is attached to this A/C.



- C. In a public hearing on May 18, 1977, EPA considered a request by the State of California for a waiver to enforce its idle mixture adjustability limitation applicable to 1980 and subsequent model year passenger cars and 1981 and subsequent model year LDT's and MDV's. This waiver was granted by the Administrator on July 10, 1978.
- D. In a public hearing on August 3 and 4, 1977, EPA considered a request by the State of California for a waiver of Federal preemption to enforce its limitations on allowable maintenance for 1980 and subsequent model year gasoline-fueled passenger cars and for 1981 and subsequent model year gasoline-fueled LDT's and MDV's. This waiver was granted by the Administrator on July 25, 1978.
- E. On March 8, 1978, the State of California requested a waiver of Federal preemption for the "California Motor Vehicle Tune-up Label Specifications" applicable to 1979 and subsequent model year passenger cars, LDT's, and MDV's. On August 18, 1978, the Administrator found that this California regulation "need not independently meet the waiver criteria of section 209(b)(1) and may be enforced by California."
- F. Historically, EPA has supported the CARB certification program by testing the majority of California-only vehicles. EPA will continue to provide this support as described in section V of this A/C.
- G. Starting in the 1980 model year, EPA initiated a Selective Certification Review (SCR) program which provides for the voluntary use by manufacturers of an Abbreviated Certification Review (ACR) method. The ACR method places primary responsibility for the conduct of the certification program with the manufacturer. This includes keeping records, making many decisions formerly made by EPA, and conducting most of the certification tests. On December 5, 1978, CARB issued a Manufacturers' Advisory Correspondence to manufacturers stating their intention to participate in the EPA SCR program.

III. Applicability

This A/C is applicable to manufacturers applying for 1980 and later model year LDV and LDT Federal certification based on receipt of a CARB Executive Order. These procedures apply to vehicles to be sold in the State of California and to vehicles to be sold outside of California for which data from the California certification program are to be used.

IV. Discussion

A. Section 209(a) of the Clean Air Act, as amended (the Act), prohibits any state from adopting or enforcing any new motor vehicle emission standard to be applicable in that state. Section 209(b)(1) of the Act allows the Administrator to waive the application of section 209(a) if the state had adopted emission standards prior to March 30, 1966, and if the state has determined that the standards are, "in the aggregate, at least as protective of public health and welfare as applicable Federal standards."



- B. The Administrator cannot grant such a waiver if the determination of the state is arbitrary and capricious, if such state does not need such state standards to meet compelling and extraordinary conditions, or if such state standards and accompanying enforcement procedures are not consistent with section 202(a) of the Act.
- C. In accordance with section 209(b)(3) of the Act, if such a waiver is granted, compliance with the state standards will be considered as compliance with Federal standards, but only with regard to vehicles intended for sale solely in the State of California. Since the Administrator has granted the waivers described in section II of this A/C for the State of California in accordance with section 209(b)(1) as discussed above, EPA will grant Federal certification for vehicles intended for sale solely in the State of California, provided those vehicles are covered by a CARB Executive Order.

V. EPA Review and Testing of California-Only Families

- A. Manufacturers may seek separate certification of vehicles intended for sale solely in the State of California (California-only families). EPA will continue to support the CARB certification program through the EPA SCR program. As previously indicated, CARB has agreed to participate in this program for the certification of California-only engine families. The SCR program currently consists of full, limited, and voluntary abbreviated certification review of families (FCR, LCR and ACR). EPA will designate certain California-only families as eligible for LCR or ACR based on pre-certification information received from the manufacturer. (CARB may choose to reject an EPA designation of an engine family as eligible for ACR, in which case CARB will assume full responsibility for the additional certification testing and processing load.) Since the low sales volume of California-only families could place many of them into the ACR category, EPA will limit the designation of California-only families qualified for ACR to a number approximately in proportion with those so designated among non-Californiaonly families. The certification of California-only families that are subject to ACR will be supported by EPA via the EPA audit program.
- B. Except for certain items uniquely addressed by the California regulations, EPA will conduct the certification process for all California-only families in the same manner as families undergoing certification under the Federal regulations. EPA will not perform the following operations in the certification process for California-only families because it would be appropriate to defer them to CARB (manufacturers should refer all questions and other certification program issues concerning these operations directly to CARB):

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- 1. Calculate deterioration factors from durability-data vehicles representing California-only engine families;
- 2. Monitor test data, unscheduled maintenance, and scheduled maintenance for any durability-data vehicle beyond the 50,000-mile test point;
- 3. Determine idle mixture adjustability under California regulations;
- 4. Approve certification maintenance schedules in accordance with California regulations;
 - 5. Determine compliance with California high-altitude provisions;
 - 6. Determine compliance with the California highway NOx factor;
- 7. Determine the acceptability of any labels required by California;
- 8. Approve idle mixture adjustments or evaporative emission control system maintenance on any emission test vehicles;
- 9. Review or approve durability information on evaporative emission control systems or determine evaporative emission deterioration factors; or
- 10. Review vehicle owner's manuals, owner's maintenance schedules, California warranty statements, and California warranty parts lists.
- C. EPA will provide confirmatory testing support for the certification of California-only families in accordance with the EPA reduced confirmatory testing policy currently in effect. (CARB may choose to require additional testing, in which case CARB will assume responsibility for the additional testing load.) Manufacturers may request, and EPA will generally grant, retests for vehicles designated to meet the State of California requirements that fail to meet the California emission standards on the first test at EPA. However, EPA will not make determinations of compliance with the California emission standards. Manufacturers must coordinate with CARB on general policies regarding retests for emission test vehicles. EPA plans to routinely provide non-methane hydrocarbon results for test vehicles representing configurations to be sold in the State of California. However, EPA will not delay or invalidate emission tests if non-methane HC results cannot be obtained unless the manufacturer stipulates that such results are necessary. This stipulation should be made by the manufacturer on the Vehicle Information Data Sheet.



D. Manufacturers are responsible for submitting to CARB all information (application, test results, etc.) required by CARB for California-only families for the completion of the California certification process. EPA will then evaluate the manufacturer's request for a Federal certificate for California-only vehicles in accordance with the provisions of section VI below.

VI. Information to be Submitted to EPA for California-Only Families

- A. A manufacturer seeking Federal certification based on a CARB Executive Order for vehicles to be sold only in California must file the following information with EPA following receipt of the CARB Executive Order:
- 1. For ACR families, an exact up-to-date copy of the Application for Certification filed with CARB (if EPA does not already possess an up-to-date application).
- 2. A copy of the CARB Executive Order(s) covering the vehicles described in the application.
- 3. A copy of the engine compartment label required by 40 CFR 86.079-35 containing one of the following statements for California-only vehicles:
 - a. "THIS VEHICLE CONFORMS TO U.S. EPA REGULATIONS APPLICABLE TO [MODEL YEAR] NEW MOTOR VEHICLES PROVIDED THAT THIS

STATE OF CALIFORNIA."

(This statement will meet EPA requirements, but California will require an additional statement of compliance with California regulations.)

- b. "THIS VEHICLE CONFORMS TO U.S. EPA AND STATE OF CALIFORNIA REGULATIONS APPLICABLE TO [MODEL YEAR] NEW MOTOR VEHICLES PROVIDED THAT THIS VEHICLE IS ONLY INTRODUCED INTO COMMERCE FOR SALE IN THE STATE OF CALIFORNIA."
- 4. The certificate information, as indicated in the "Application Format for Certification of Light-Duty Motor Vehicles--[Model Year]--Recommended Procedures." (See, for example, page 5-24 of the "Application Format for Certification of Light-Duty Motor Vehicles--1980 Model Year--Recommended Procedures.")
- 5. Information required by sections 202(a)(4) and 206(a)(3) of the Clean Air Act as described by A/C's Nos. 76 and 76-1 relating to emission control device safety and unregulated pollutants. Additional information required by EPA for future model years will also be required for California-only families for those model years.



- B. A Federal LDV or LDT certificate for the sale of vehicles in California will be issued if the conditions of paragraph VI.A are met. The certificate will bear the statement "This certificate covers only those vehicles introduced into commerce for sale in the State of California."
- C. In addition to the information required in paragraph VI.A, each manufacturer must submit:
 - 1. Service information as required in 40 CFR 86.078-7(b).
- 2. Customer maintenance instructions as required in 40 CFR 86.079-39.
- 3. A copy of the "Clean Air Warranty" in accordance with the Clean Air Act, section 207(a), and with A/C No. 15A, paragraph E.
- 4. Completed Vehicle Information Sheets and Manufacturer's Test
 Data Input Sheets (or computer readable input) as described in the "Application for Certification--Request for Certificate." All tests conducted on
 emission test vehicles should be described on the input sheets.

VII. Certification of 50-State Families

- A. The "Application Format for Certification of Light-Duty Motor Vehicles—1980 Model Year—Recommended Procedures" indicates that separate applications need not be submitted for vehicles to be sold in California, thus providing for the certification of "50-state" families. Manufacturers may elect to pursue this certification strategy; however, the provisions of 40 CFR 86.079-30(a)(3) do not allow the issuance of certificates of conformity covering more than one set of emission standards. Therefore, all vehicles within 50-state families must meet the Federal emission standards and certification regulations. This does not preclude the manufacturer from obtaining a CARB Executive Order from the State of California for any or all of the vehicles included in the 50-state family. It should be noted, however, that the Federal certification alone of those vehicles included in 50-state families does not entitle such vehicles to be sold in the State of California. Both a CARB Executive Order and a Federal certificate must be obtained before any vehicles may be legally sold in California.
- B. For vehicles within 50-state families that have met both EPA and CARB requirements, and are to be sold only within the State of California, the following engine compartment label statement will be acceptable:

"THIS VEHICLE CONFORMS TO U.S. EPA AND STATE OF CALIFORNIA REGULATIONS APPLICABLE TO [MODEL YEAR] NEW MOTOR VEHICLES."



Alternately, the manufacturer may use the language approved for 49-state vehicles plus use separate language indicating compliance with State of California regulations. These methods of complying with engine compartment label requirements should not be used for 50-state vehicles to be sold outside the State of California.

VIII. <u>Carry-Across of Data from California-Only Engine Families for Use in Federal Certification to Federal Standards</u>

- A. Manufacturers may wish to use data generated by emission-data or durability-data test vehicles representing California-only engine families for the certification of vehicles to be sold outside of California. Such data may only be used for Federal certification if Federal requirements are met. In general, the carry-across acceptability requirements stipulated in A/C No. 17E must be met in addition to the Federal emission standards in order for carry-across data to be used for certification.
- B. The following special considerations should also be noted in the use of data from California-only families for families intended to comply with Federal standards:
- l. EPA considers the California minimum maintenance interval and idle adjustability requirements to be more stringent than EPA scheduled maintenance requirements. However, durability data carry-across for Federal certification of a vehicle for sale in states other than California normally will not be allowed if the recommended maintenance interval for the 49-state vehicle exceeds the interval used by the California vehicle. Recommended maintenance items contained in owner's manuals for a vehicle to be sold outside of California may be more frequent than were performed on the durability-data vehicle if approved by EPA under the provisions of A/C No.15A.
- 2. California regulations for 1980 and subsequent model year passenger cars and 1981 and subsequent model year LDT's allow compliance with optional NOx standards by extending durability mileage accumulation to 100,000 miles. Manufacturers may wish to certify non-California vehicles based on durability data from a 100,000-mile California durability-data vehicle. EPA will accept data from the first 50,000 miles from such vehicles, provided that all EPA durability-data vehicle requirements are met. Such intended use of California durability-data vehicles must be approved in advance by EPA prior to the initiation of mileage accumulation.
- 3. Because the Federal CO standard for 1980 and subsequent model year LDV's is numerically more stringent than the California CO standard for 1980 and subsequent model year LDV's, the CARB CO emission line-crossing constraint for durability-data vehicles (as described in the CARB Manufacturers' Advisory Correspondence \$78-20) is less stringent than EPA constraints. Thus, LDV durability data that line-cross the Federal CO standard will not be

accepted for carry-across for Federal certification for sale outside of California. It should also be noted that deterioration factors (d.f.'s) to be used for Federal certification will be calculated in accordance with the provisions of 40 CFR 86.079-28(a)(4). Thus the d.f. used for 49-state certification may differ from the d.f. used for CARB certification.

IX. Approval of Running Changes, Field Fixes, and Amendments to the Application for Certification

- A. The provisions of this section apply to California-only engine families which have been certified based on CARB Executive Orders. Engine families representing vehicles to be sold outside of California must meet EPA requirements for the approval of running changes, field fixes, and application amendments.
- B. Running changes and field fixes approved by CARB will be approved by EPA (with no additional testing required) on receipt of a copy of the change request, a copy of the CARB approval of such a change or fix, and the amended pages for the application for certification.
- C. When amendments are made to the California application for certification, exact copies of those amendments must be filed with EPA. Copies of the amendments should not be submitted to EPA until they are approved by CARB. A copy of the CARB approval of the amendments must accompany the amendment.

Mobile Source Air Pollution Control

Attachment

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1980 Exhaust Emission Standards

Applica- bility	Vehicle Type (a)	Equivalent Inertia Weight - lbs. (b)	Exhaust Emission Standards - grams per vehicle mile		
			Hydrocarbons (c)	Carbon Monoxide	Oxides of Nitrogen (d)(e)
Calif.	PC	A11	(0.39) 0.41	9.0	1.0 (1.5)
	LDT	0-3999	(0.39) 0.41	9.0	1.5
	LDT	4000-5999	(0.50) 0.50	9.0	2.0
	MDV	ALL	(0.9) 0.9	17	2.3
Federal	LDV	ALL	0.41	7.0	2.0
	LDT	ALL	1.7	18	2.3

- (a) "LDV" means light-duty vehicle.
 - "PC" means passenger car.
 - "IDT" means light-duty truck (less than or equal to 6000 lbs. GVWR for California, and less than or equal to 8500 lbs. GVWR for Federal). "MDV" means medium-duty vehicle (6001-8500 lb. GVWR).
- (b) Equivalent inertia weights are determined under subparagraph 86.129-80(a).
- (c) Hydrocarbon standards in parentheses apply to non-methane hydrocarbons.
- (d) NOx standards in parentheses for California are applicable to engine families which are certified under the "Optional 100,000 Hile Certification Procedure."
- (e) In addition, for passenger cars, California requires that the maximum projected emissions of oxides of nitrogen measured on the Federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600, Subpart B) shall be no greater than 1.33 times the applicable standard shown in the table. Both the projected emissions and the HWFET standard shall be rounded to the nearest 0.1 g/mi before being compared.